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Quality of Service Priority and Preemption

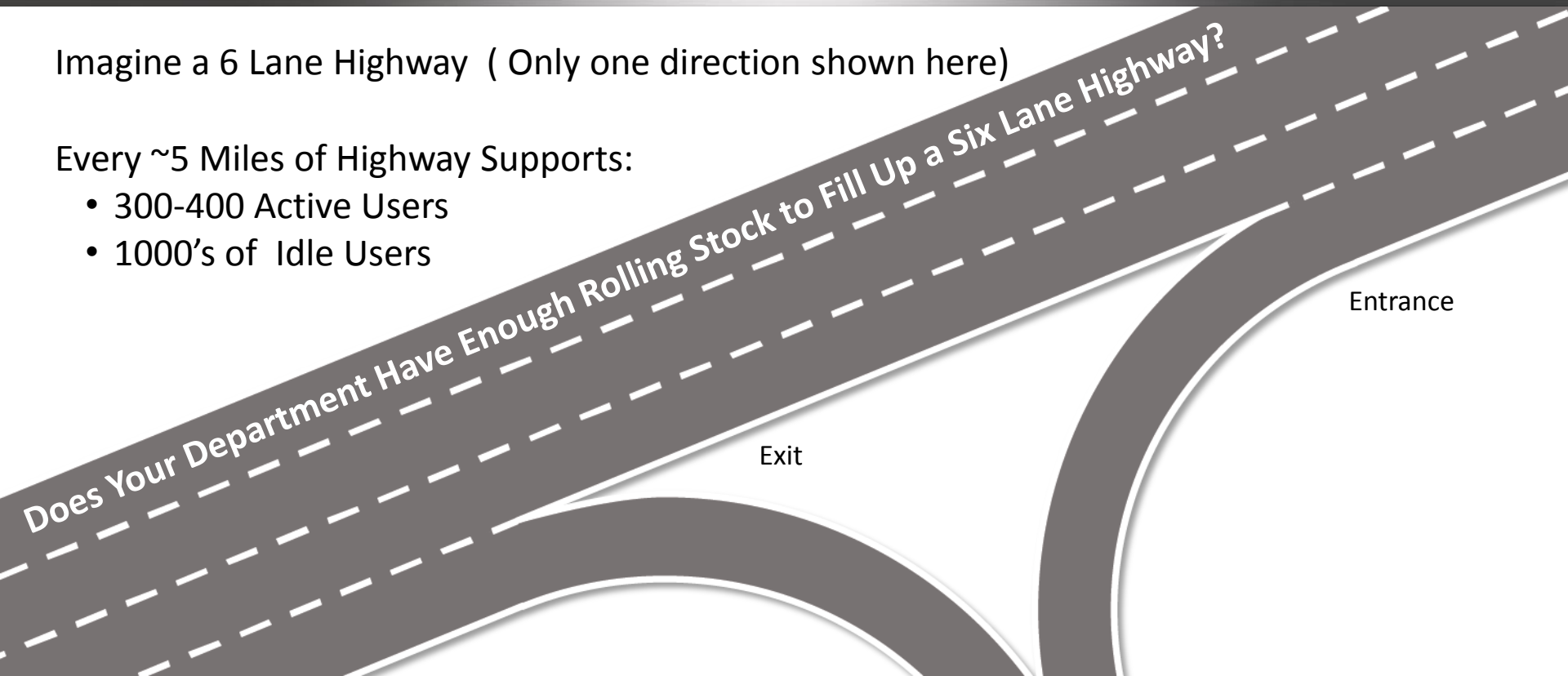
Brian Kassa

Director of Technology Planning and Development

Imagine a 6 Lane Highway (Only one direction shown here)

Every ~5 Miles of Highway Supports:

- 300-400 Active Users
- 1000's of Idle Users



Quality of Service

Quality of Service = Setting Cruise Control at 70 Miles Per Hour and driving 70 Miles Per Hour



Quality of Service = Setting Cruise Control at 70 Miles Per Hour and driving 70 Miles Per Hour



Entrance

Exit

Priority

Priority = This Lane is Yours,
everyone else move over

ILLEGAL
TO CROSS
DOUBLE
WHITE
LINE

Priority = This Lane is Yours, everyone else move over

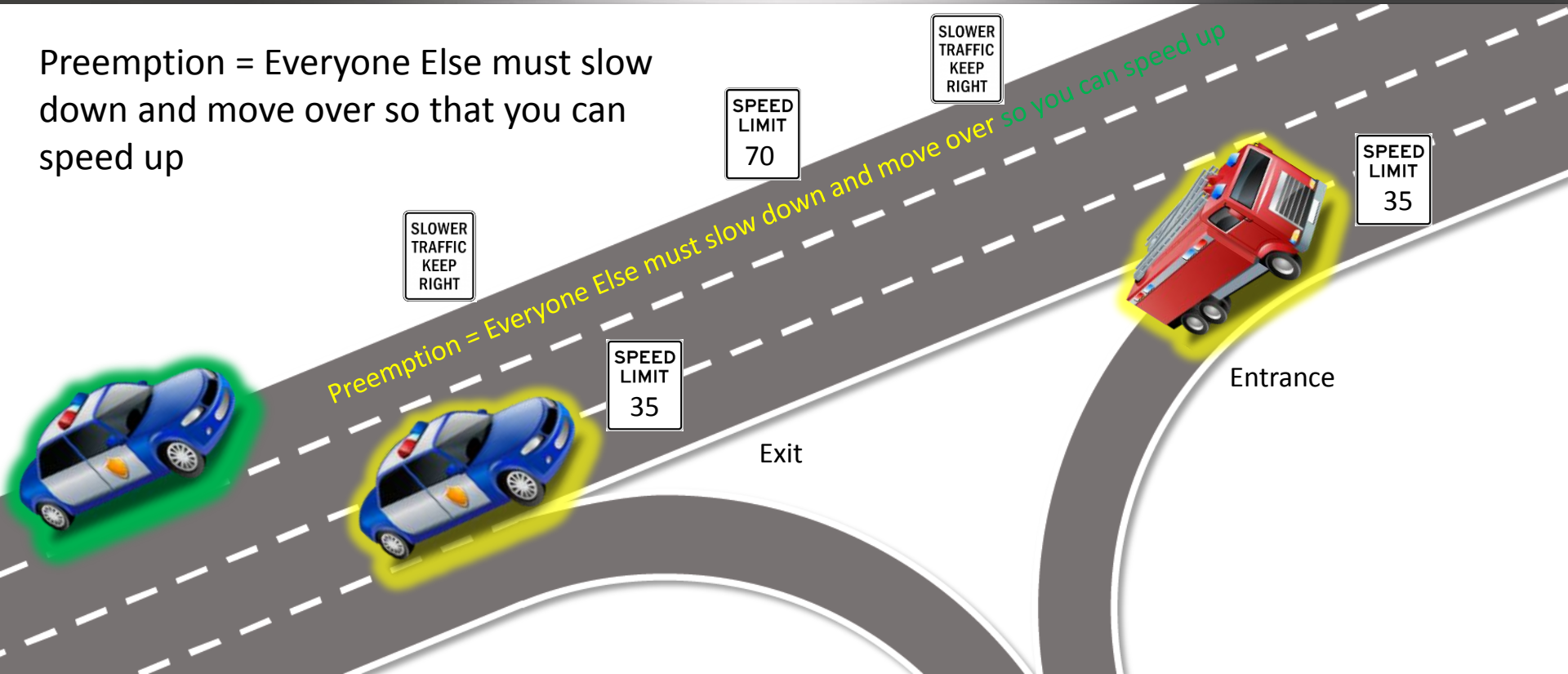


Entrance

Exit

Preemption: Among First Responders

Preemption = Everyone Else must slow down and move over so that you can speed up

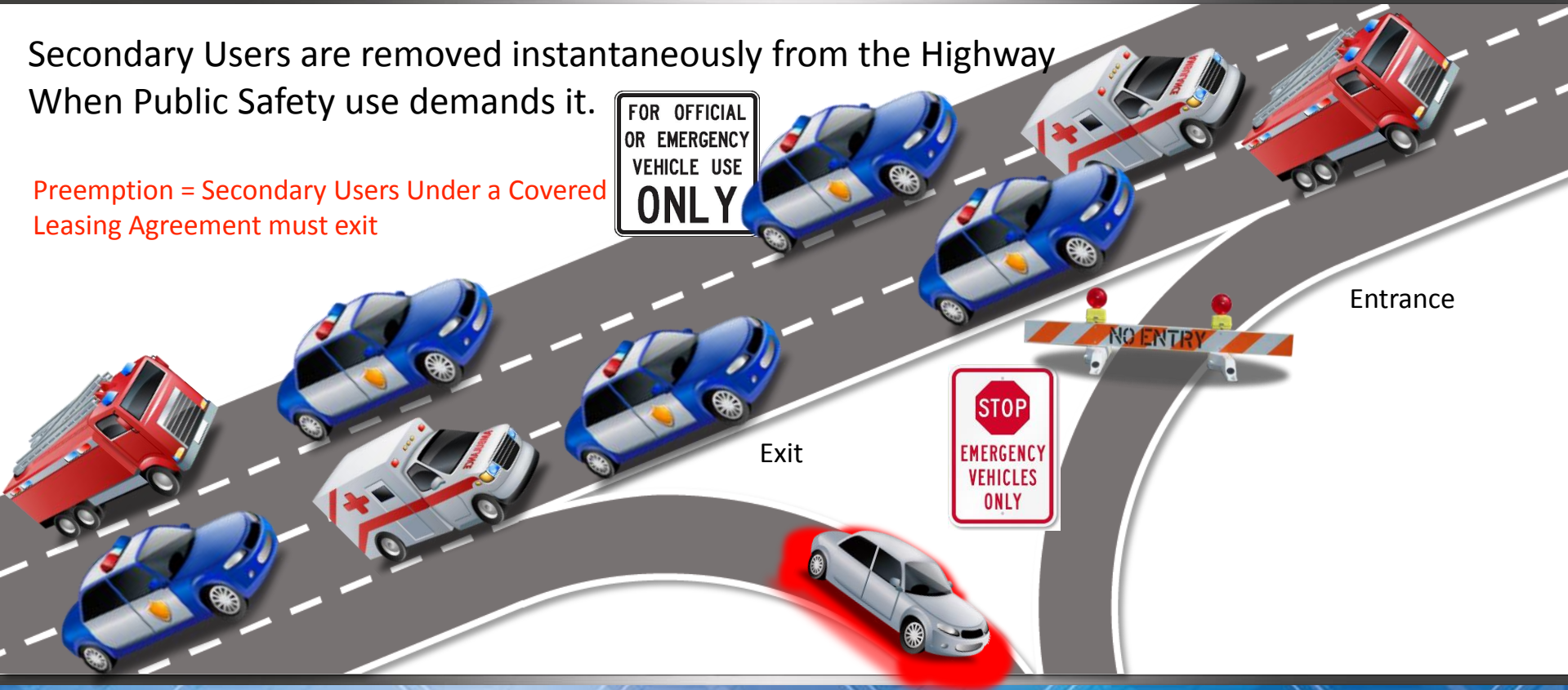


Preemption:

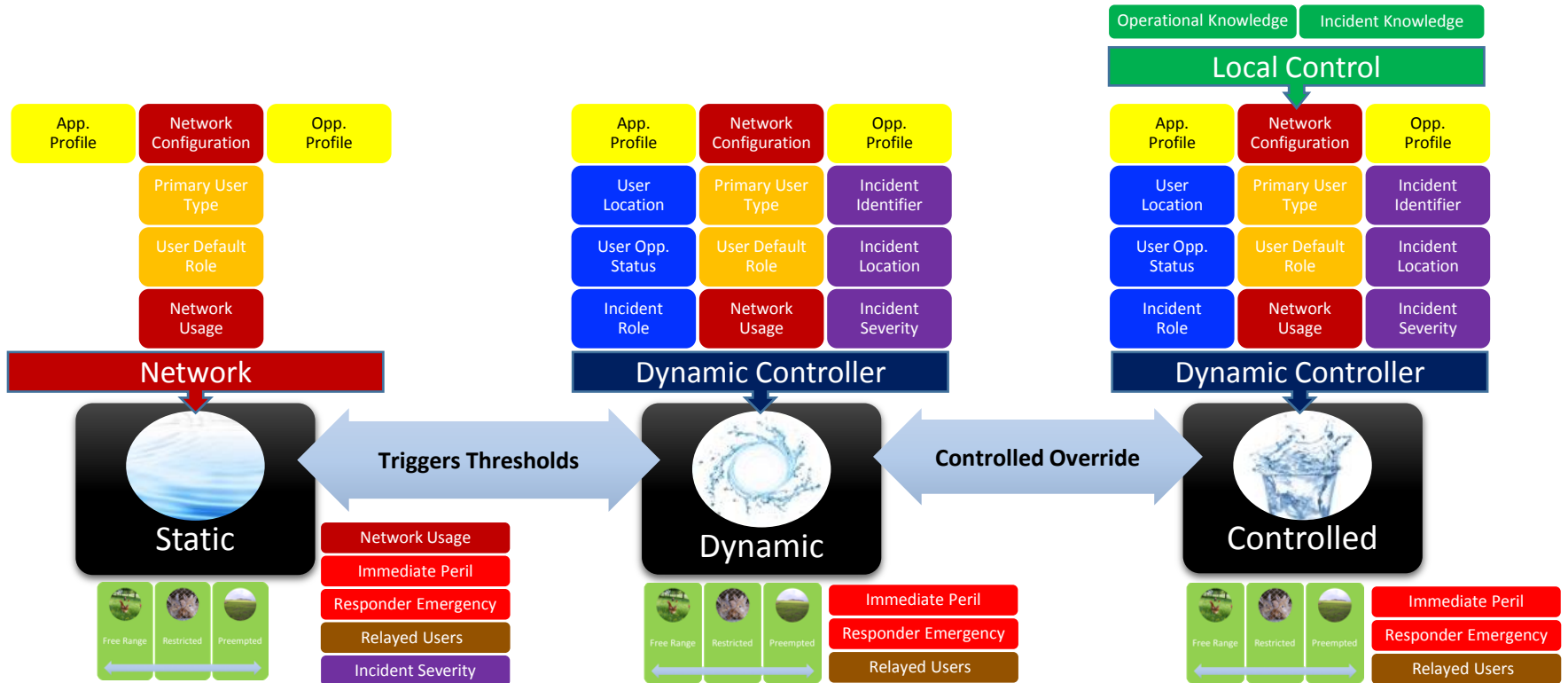
Between Primary Users and Secondary Users Under a CLA

Secondary Users are removed instantaneously from the Highway
When Public Safety use demands it.

Preemption = Secondary Users Under a Covered
Leasing Agreement must exit

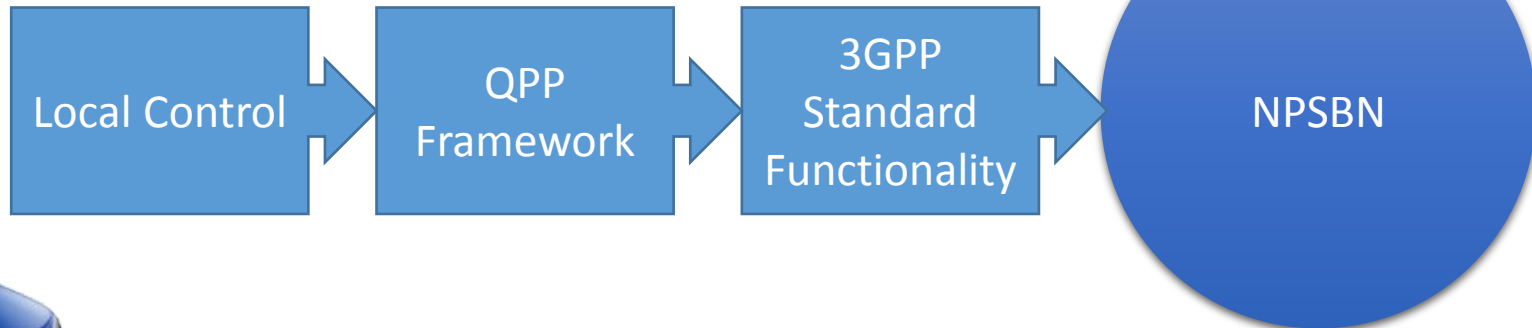


QPP Framework



How Does this Work Together

Public Safety may use **Local Control** to **Influence** the **QPP Framework** which uses **3GPP Standard Functionality** to **Provide** **Quality of Service Priority and Preemption** on the **NPSBN**



Public Safety